

<b>Recipe 20 - Configuration Guide for Setting up Netegrity eTRust SiteMinder 6.0.1.04 as an AA and CS</b>	
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<b>Version 2.0.0</b>	

## 1 Setup

### 1.1 Terms and Introduction

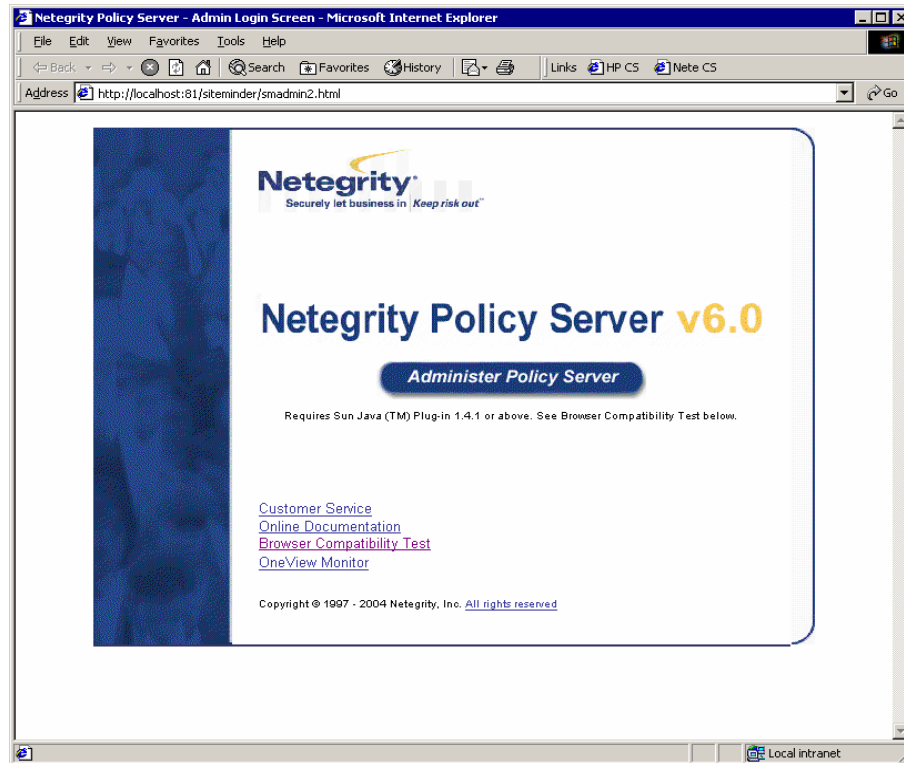
The SAML 1.0 is one of the adopted schemes within the E-Authentication architectural framework. This guide should help you setup SAML 1.0 and Netegrity eTRust SiteMinder 6.0.1.04 as an Agency Application (AA) and Credential Service (CS). Remember that the Netegrity eTRust SiteMinder setup screens are often the same, whether setting up an AA or a CS. After reviewing the terms, configure your scheme to handle SAML 1.0, starting at the login page shown in Figure 20-1.

Term	Definition
Agency Application (AA)	An online service provided by a government agency that requires an end user to be authenticated.
Credential Service (CS)	A service of a CSP that provides credentials to subscribers for use in electronic transactions. If a CSP offers more than one type of credential, then each one is considered a separate CS.
Credential Service Provider (CSP)	An organization that offers one or more CSs. Sometimes known as an Electronic Credential Provider (ECP).
Project Management Office (PMO)	The PMO is the organization that handles E-Authentication program management, administration, and operations.

## 2 Partner Configuration

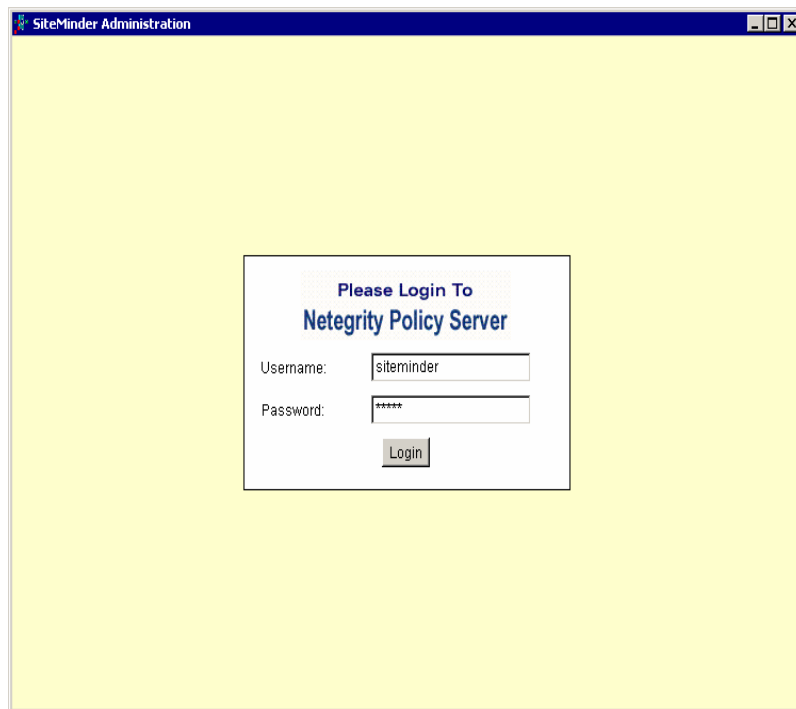
### 2.1 Open Netegrity Policy Server 6.0

Open Netegrity Policy Server 6.0 by clicking on **Start > Programs > SiteMinder > Netegrity Policy Server User Interface**. Netegrity Policy Server 6.0 screen should appear as shown in Figure 20-1. Next, click on the **Administer Policy Server**.



**Figure 20-1: Netegrity Policy Server 6.0**

The SiteMinder Administration login screen should appear as shown in Figure 20-2. Enter a valid **Username** and **Password** and click the **Login** button.



**Figure 20-2: SiteMinder Administration Login Screen**

## 2.2 Configure a Partner AA

Once you have successfully logged into the application, the SiteMinder 6.0 Administration screen will appear as shown in Figure 20-3.

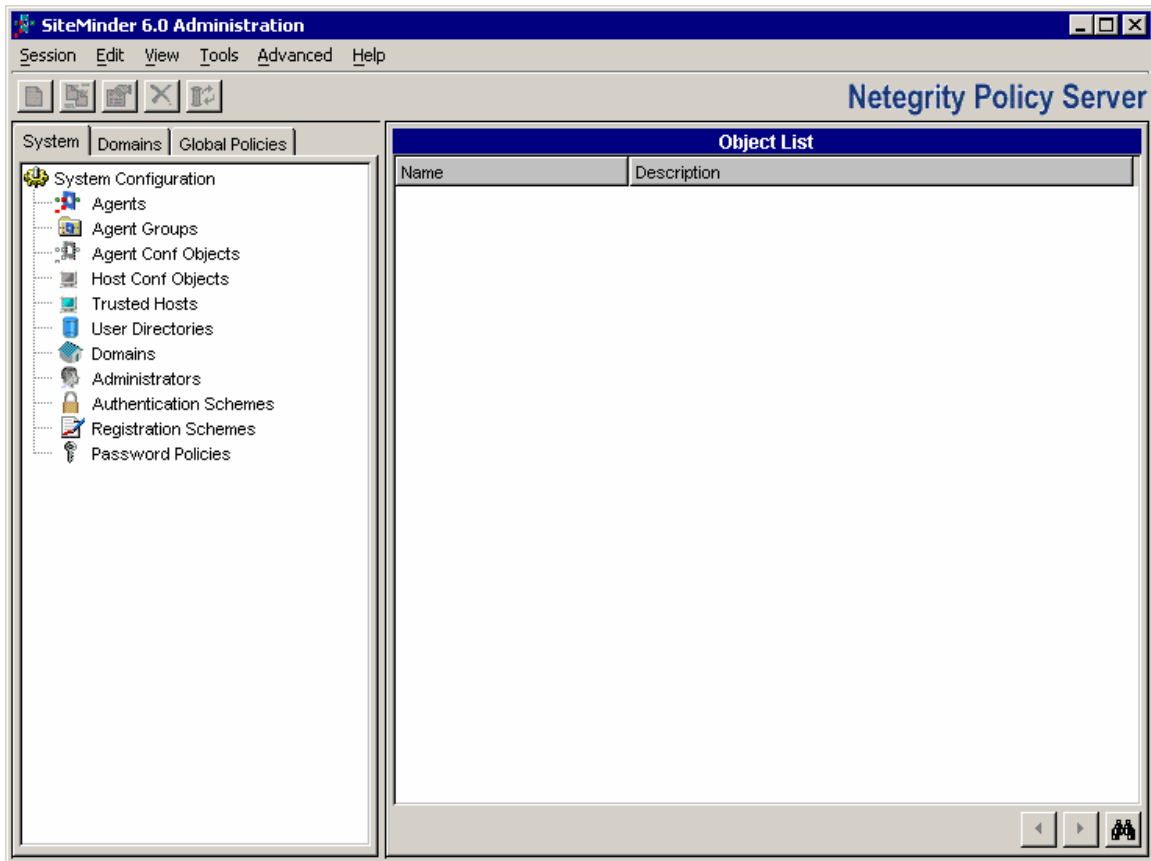
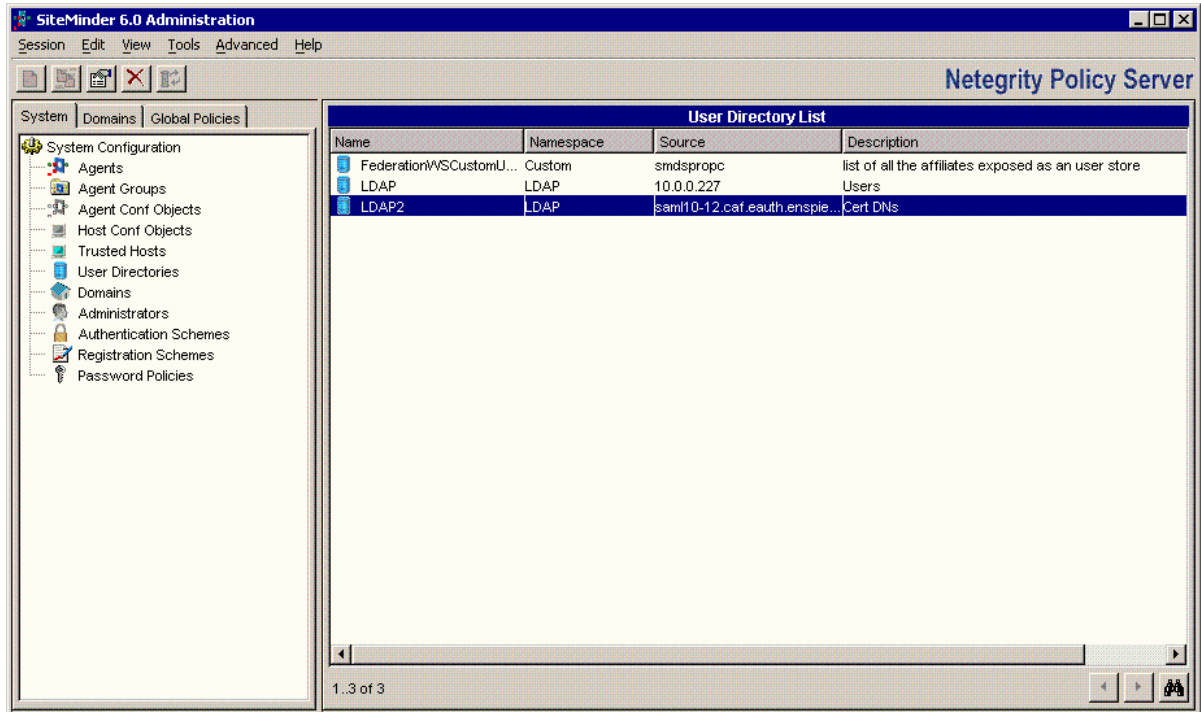


Figure 20-3: SiteMinder 6.0 Administration Screen

The Lab has used LDAP to store information on client certificates, although that is not the only method possible. First, verify that LDAP directory resources have been defined for Certificates. This is accomplished by clicking on the **System** tab (left side of the Administration screen) and then selecting **User Directories**. The User Directory List screen will appear as shown in Figure 20-4. To create a new Directory resource right click on **User Directories** and select **Create Directory**.



**Figure 20-4: User Directory List**

If creating a Directory has been chosen, the User Directory Properties screen will appear as shown in Figure 20-5. Provide all necessary configuration information as demonstrated below. The **LDAP User DN Lookup** area is important for configuration. Next, enter the values for **Start** and **End** as shown in Figure 20-5 and then select **Apply**. This is how the Lab maps the subject of the certificate to a “user” in the LDAP store.

The screenshot shows the 'SiteMinder User Directory Dialog' with the 'User Directory Properties' tab selected. The dialog is divided into several sections:

- Name and Description:** \*Name: LDAP2, Description: Cert DNs.
- Directory Setup Tab:**
  - Directory Setup Section:** \*NameSpace: LDAP: (dropdown), \*Server: sam110-12.caf.eauth.enspier.net:389 (with a 'Configure...' button).
  - LDAP Search Section:** Root: dc=enspier,dc=net; Scope: Subtree (dropdown); Max time: 30 seconds; Max results: 0.
  - LDAP User DN Lookup Section:** Start: (cn=; End: ); Example: (cn=ID-From-Login).
- Buttons:** View Contents..., OK, Cancel, Apply.
- Status Bar:** User Directory LDAP2.

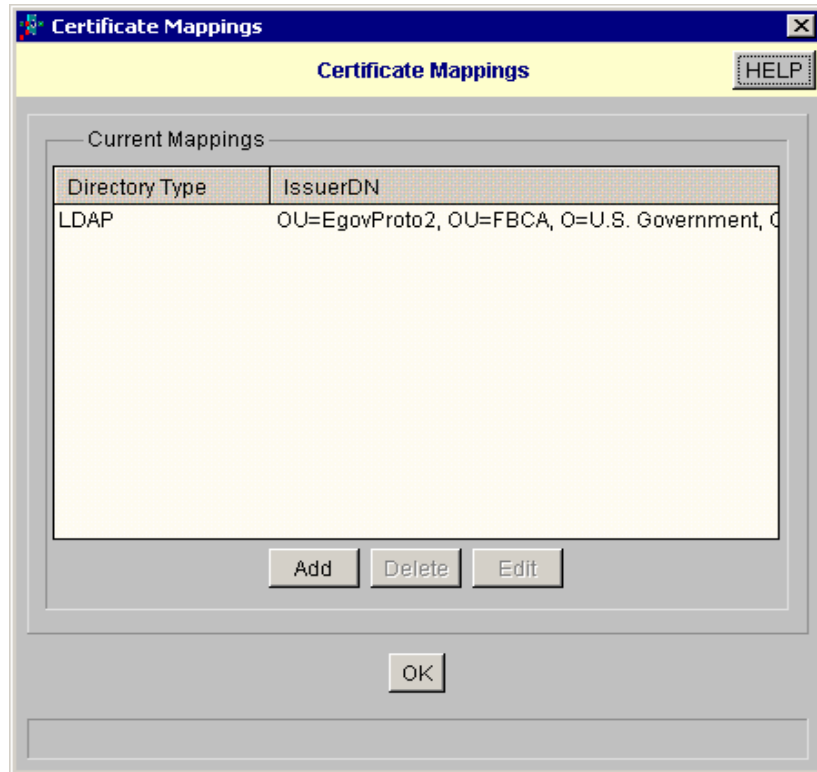
**Figure 20-5: User Directory Properties – Directory Setup**

Next, select **Credentials and Connection** tab from the User Directory Properties screen as shown in Figure 20-6. Provide all necessary configuration information as demonstrated below. Be sure you have entered the correct credentials for the LDAP store.

The screenshot shows the 'SiteMinder User Directory Dialog' window. The title bar reads 'SiteMinder User Directory Dialog'. The main title is 'User Directory Properties' with a 'HELP' button. Below the title, there are two input fields: '\*Name:' with the value 'LDAP2' and 'Description:' with the value 'Cert DNs'. There are three tabs: 'Directory Setup', 'Credentials and Connection' (which is selected), and 'User Attributes'. The 'Credentials and Connection' tab contains a section titled 'Administrator Credentials' with a checkbox 'Require Credentials' that is checked. To the right of this checkbox are three input fields: '\*Username:' with the value 'cn=Directory Manager', '\*Password:' with masked characters '\*\*\*\*\*', and '\*Confirm Password:' with masked characters '\*\*\*\*\*'. Below this section are two unchecked checkboxes: 'Run in Authenticated User's Security Context' and 'Secure Connection'. At the bottom of the dialog, there is a 'View Contents...' button, and further down, 'OK', 'Cancel', and 'Apply' buttons. The status bar at the very bottom reads 'User Directory LDAP2'.

**Figure 20-6: Credentials and Connections**

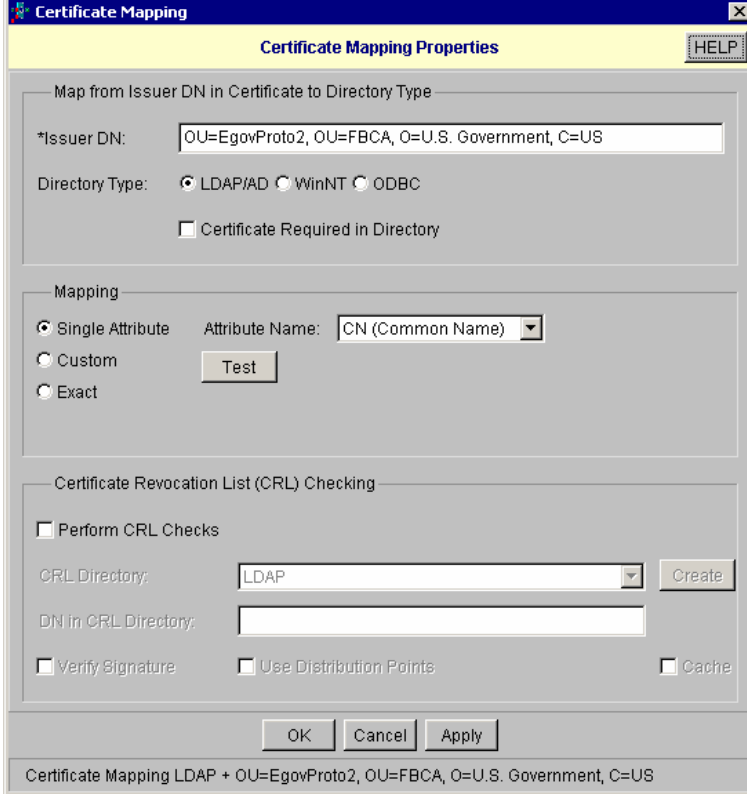
Next, you must verify that the certificate mapping rules are in place. This is completed by going to the SiteMinder 6.0 Administration screen (Figure 20-3) and clicking on **Advanced > Certificate Mapping**. The Certificate Mappings screen will appear as shown in Figure 20-7. To add a certificate mapping, select the **Add** button.



**Figure 20-7: Certificate Mappings**



The Certificate Mapping Properties screen will appear as shown in Figure 20-8. This screen provides an example of a mapping. Provide all appropriate configuration information as demonstrated below. The **Issuer DN** is taken from your client's (AA) certificate in the issuer field. Be sure to select **LDAP/AD**, **Single Attribute**, and **CN (Common Name)** as shown in Figure 20-8. Select **OK** when these steps have been completed.



The image shows a Windows-style dialog box titled "Certificate Mapping Properties". It has a yellow header bar with the title and a "HELP" button. The dialog is divided into several sections:

- Map from Issuer DN in Certificate to Directory Type:** This section contains a text field for "\*Issuer DN:" with the value "OU=EgovProto2, OU=FBCA, O=U.S. Government, C=US". Below it are radio buttons for "Directory Type:" with "LDAP/AD" selected, and "WinNT" and "ODBC" unselected. There is also an unchecked checkbox for "Certificate Required in Directory".
- Mapping:** This section has radio buttons for "Single Attribute" (selected), "Custom", and "Exact". Next to "Single Attribute" is a dropdown menu for "Attribute Name:" showing "CN (Common Name)". A "Test" button is located below the dropdown.
- Certificate Revocation List (CRL) Checking:** This section starts with an unchecked checkbox for "Perform CRL Checks". Below it is a "CRL Directory:" dropdown menu showing "LDAP" and a "Create" button. Underneath is an empty text field for "DN in CRL Directory:". At the bottom of this section are three unchecked checkboxes: "Verify Signature", "Use Distribution Points", and "Cache".

At the bottom of the dialog are three buttons: "OK", "Cancel", and "Apply". A status bar at the very bottom displays the text "Certificate Mapping LDAP + OU=EgovProto2, OU=FBCA, O=U.S. Government, C=US".

**Figure 20-8: Certificate Mapping Properties**

Next, verify that the created LDAP resources have been added to the Affiliates container. This accomplished by clicking on the **System** tab and selecting **Domains**. The Domain List screen will appear as shown in Figure 20-9. To view its properties double clicking on **Affiliates** as demonstrated below.

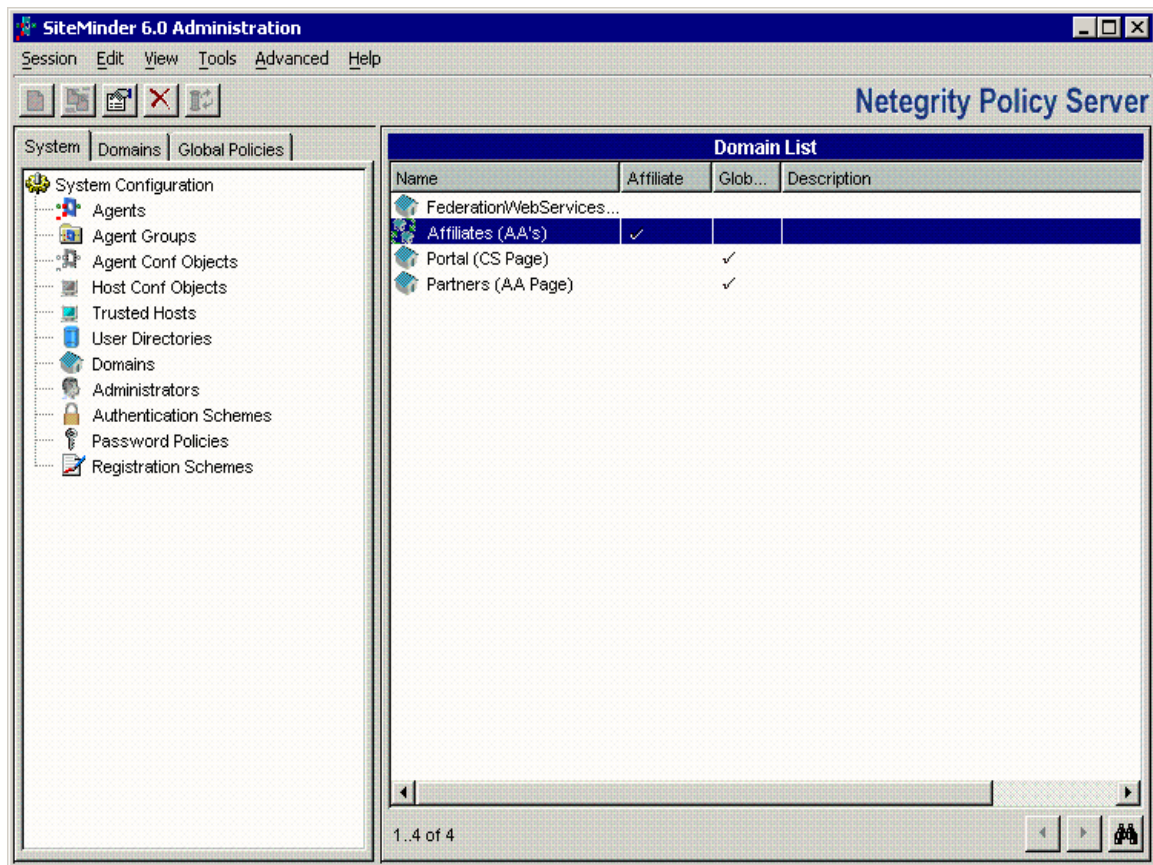
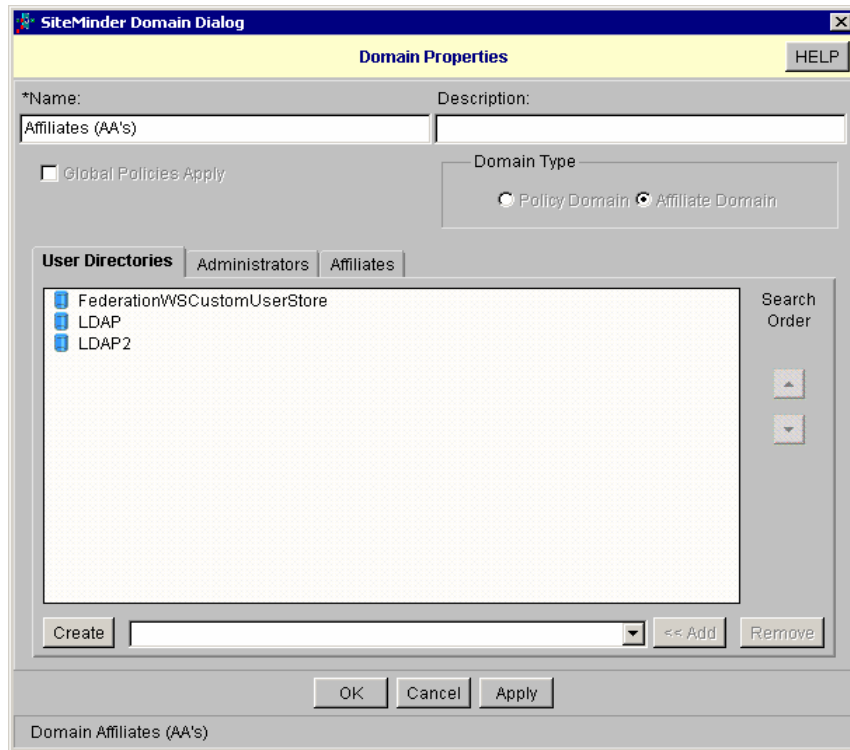


Figure 20-9: Domain List

The Domain Properties screen will appear as shown in Figure 20-10. The created LDAP resource should be listed under the **User Directories** tab.



**Figure 20-10: Domain Properties**

Next, you will need to define the affiliate properties. This is done by clicking on the **Domains** tab (left side of the SiteMinder Administration screen) and then selecting **Attributes > Affiliates** as demonstrated in Figure 20-11. To add an affiliate, right click on **Affiliates** and select **Create Affiliate**. Be sure to make the affiliate name the same as the CN from the subject of their client certificate.

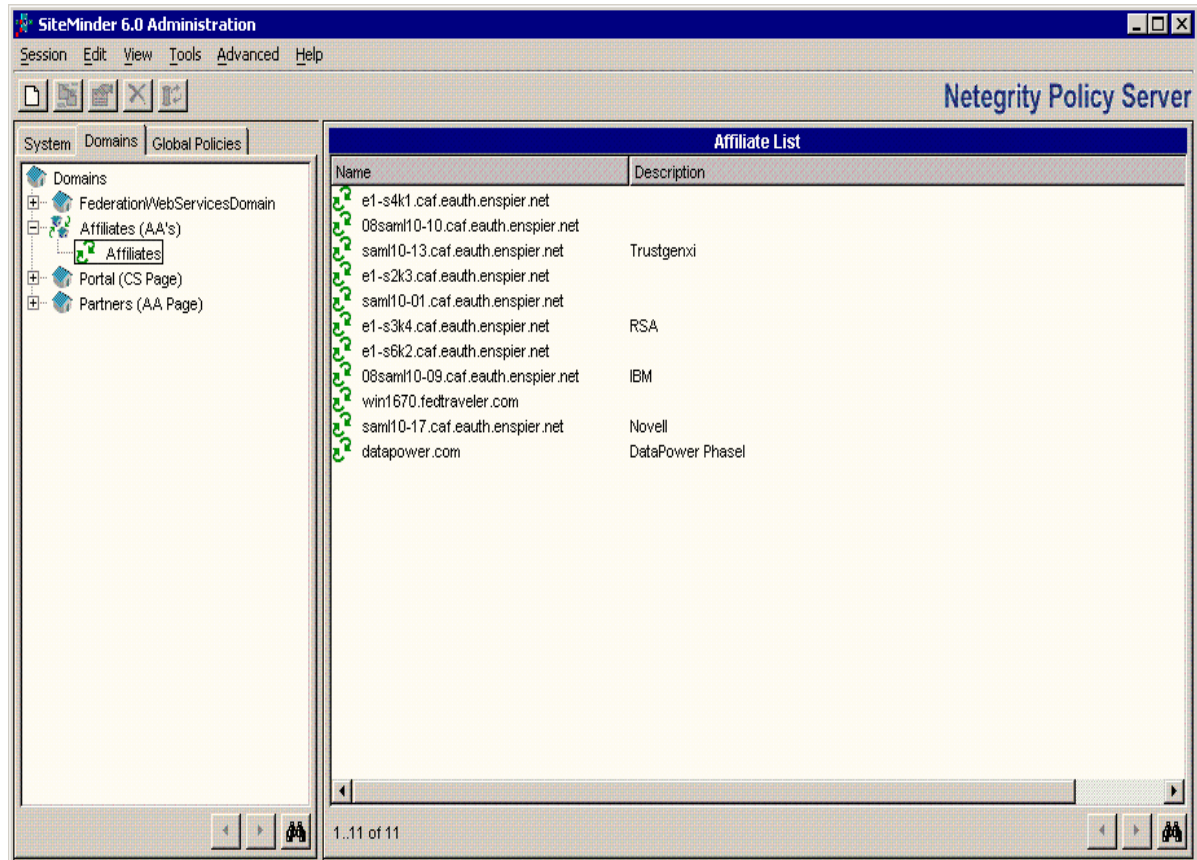


Figure 20-11: Affiliate List

The Affiliate Properties screen will appear as shown in Figure 20-12. There are three (3) User sub tabs that need to be set. As demonstrated below, click on the **Federation/WSCustomUserStore** tab and provide the appropriate configuration information.

**SiteMinder Affiliate Dialog**

**Affiliate Properties** HELP

\*Name:  Description:

\*Password:  \*Confirm Password:

☒ Enabled ☐ Allow Notification

\*Authentication URL

\*\*Don't forget to set up a policy to protect this Authentication URL.

**Users** | Assertions | Session | Attributes | IP addresses | Time | Advanced

**FederationWSCustomUserStore** | LDAP | LDAP2

Name	User Class
affiliate:Affiliates (AA's)	Group

(FederationWSCustomUserStore is an Authentication and Authorization Directory)

Affiliate e1-s6k2.caf.eauth.enspier.net

**Figure 20-12: Affiliate Properties - FederationWSCustomUserStore**

Next, set the value for LDAP2 by clicking on the **LDAP2** tab. As shown in Figure 20-13, the Lab sets LDAP2 to **all**. You will probably want to be more specific. The LDAP2 tab was defined in the “User Directory” step above. To add a user or group of users, select the **Add/Remove** button.

The image shows a 'SiteMinder Affiliate Dialog' window with the title 'Affiliate Properties'. It contains several fields for configuration: \*Name (win1670.fedtraveler.com), \*Password (masked), \*Confirm Password (masked), \*Authentication URL (http://saml10-12.caf.eauth.enspier.net/siteminderagent/redirect), and a checkbox for 'Enabled' which is checked. There is also an 'Allow Notification' checkbox which is unchecked. Below these fields are tabs for 'Users', 'Assertions', 'Session', 'Attributes', 'IP addresses', 'Time', and 'Advanced'. The 'Users' tab is selected, and within it, there are sub-tabs for 'FederationWSCustomUserStore', 'LDAP', and 'LDAP2'. The 'LDAP2' sub-tab is active, showing a table with two columns: 'Name' and 'User Class'. The table contains one entry: 'all' for both columns. Below the table is an 'Add/Remove...' button and an 'Allow Nested Groups' checkbox which is unchecked. At the bottom of the dialog are 'OK', 'Cancel', and 'Apply' buttons. A status bar at the very bottom says 'Affiliate win1670.fedtraveler.com'.

Name	User Class
all	all

**Figure 20-13: Affiliate Properties – LDAP2**

The Users/Groups screen will appear as shown in Figure 20-14. To add a single user, select the user from the **Available Members** column and click on the ← button. You could also type **all** in the **Entry** field and click **Add to Current Members**. Next, select **Apply** and then **OK** when complete.

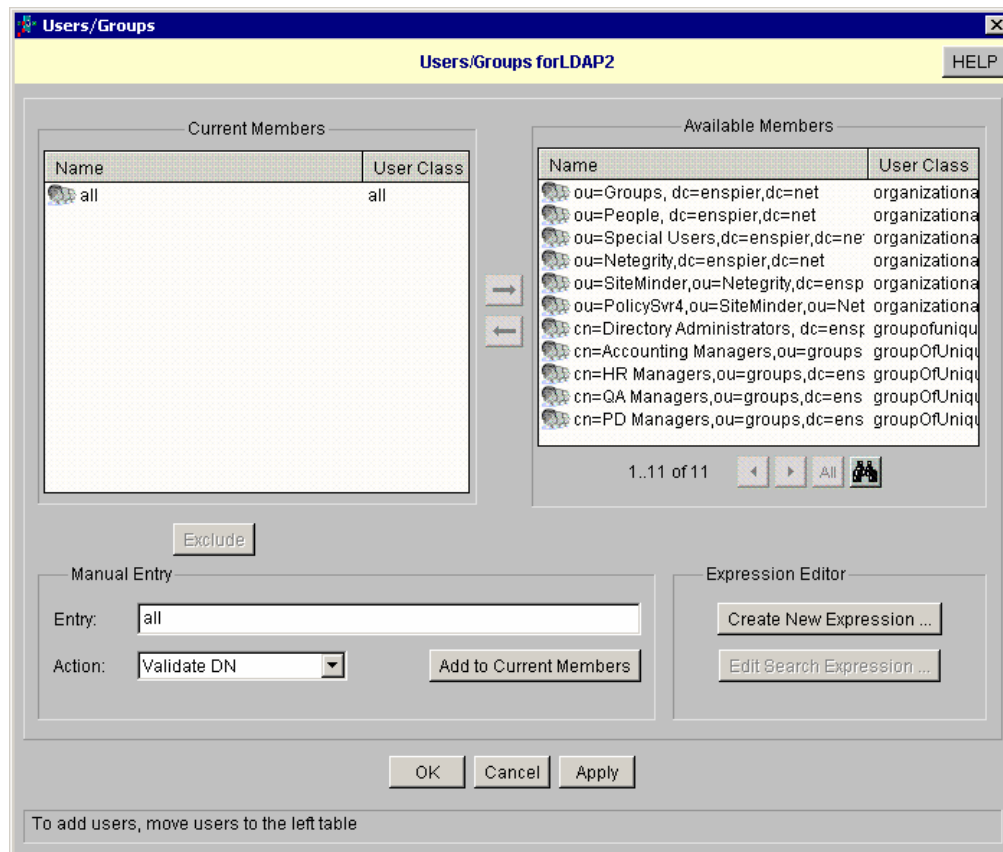


Figure 20-14: Users/Groups

Next, verify that SAML 1.0 has been set. As demonstrated in Figure 20-15, click on the **Assertions** tab from the Affiliate Properties screen. The **SAML Version** pull down should be set to 1.0. Select **Apply** when complete.

The screenshot shows the 'SiteMinder Affiliate Dialog' window with the 'Affiliate Properties' tab selected. The 'Name' field is 'win1670.fedtraveler.com'. The 'Description' field is empty. The 'Password' and 'Confirm Password' fields are masked with asterisks. The 'Enabled' checkbox is checked, and the 'Allow Notification' checkbox is unchecked. The 'Authentication URL' is 'http://saml10-12.caf.eauth.enspier.net/siteminderagent/redirect'. A note below states: '\*\*Don't forget to set up a policy to protect this Authentication URL.' The 'Assertions' tab is selected, showing the 'Audience' field (empty), '\*Validity Duration' set to '60' seconds, '\*Skew Time' set to '30' seconds, and 'SAML Version' set to '1.0' in a dropdown menu. At the bottom are 'OK', 'Cancel', and 'Apply' buttons. The status bar at the very bottom shows 'Affiliate win1670.fedtraveler.com'.

**Figure 20-15: Affiliate Properties - Assertions**



Once you have verified SAML 1.0 has been set, click on the **Attributes** tab as demonstrated in Figure 20-16. The Attributes tab is where LDAP attributes are mapped to the SAML assertion attributes. Select the **Apply** button when complete.

The screenshot shows the 'SiteMinder Affiliate Dialog' with the 'Affiliate Properties' tab selected. The 'Attributes' sub-tab is active, displaying an 'Attribute List' table. The table has two columns: 'Type' and 'Name Value Pair'. It contains three entries, all of type 'Affiliate-HTTP-Header-Variable'. Below the table are 'Create', 'Edit', and 'Remove' buttons. At the bottom of the dialog are 'OK', 'Cancel', and 'Apply' buttons. The status bar at the very bottom shows 'Affiliate win1670.fedtraveler.com'.

**SiteMinder Affiliate Dialog**

**Affiliate Properties** [HELP]

\*Name: win1670.fedtraveler.com Description:

\*Password: \*\*\*\*\* \*Confirm Password: \*\*\*\*\*

☒ Enabled ☐ Allow Notification

\*Authentication URL: http://saml10-12.caf.eauth.enspier.net/siteminderagent/redirectj

\*\*Don't forget to set up a policy to protect this Authentication URL.

Users Assertions Session **Attributes** IP addresses Time Advanced

Attribute List

Type	Name Value Pair
Affiliate-HTTP-Header-Variable	csid=<%userattr="title"%>
Affiliate-HTTP-Header-Variable	assuranceLevel=<%userattr="street"%>
Affiliate-HTTP-Header-Variable	commonName=<%userattr="cn"%>

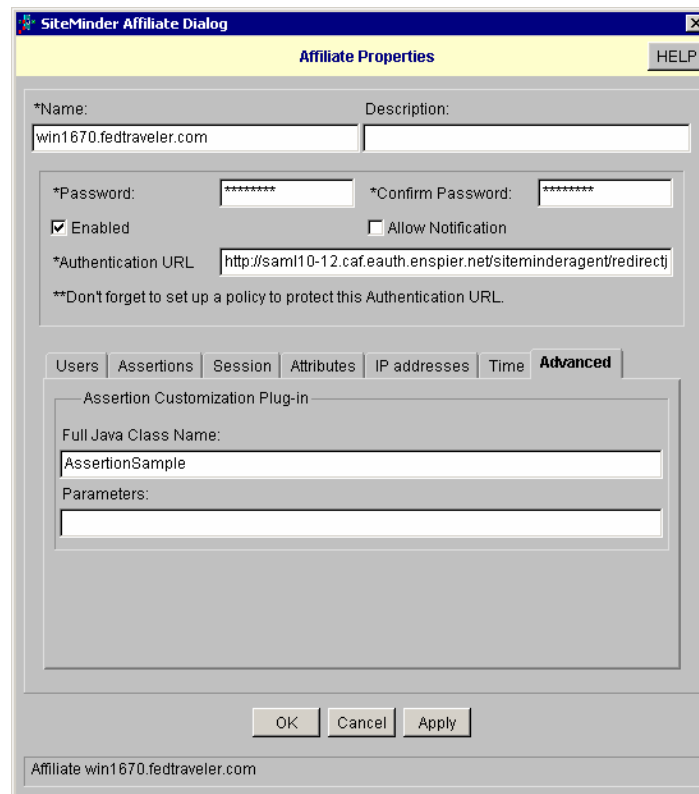
[Create] [Edit] [Remove]

[OK] [Cancel] [Apply]

Affiliate win1670.fedtraveler.com

**Figure 20-16: Affiliate Properties - Attributes**

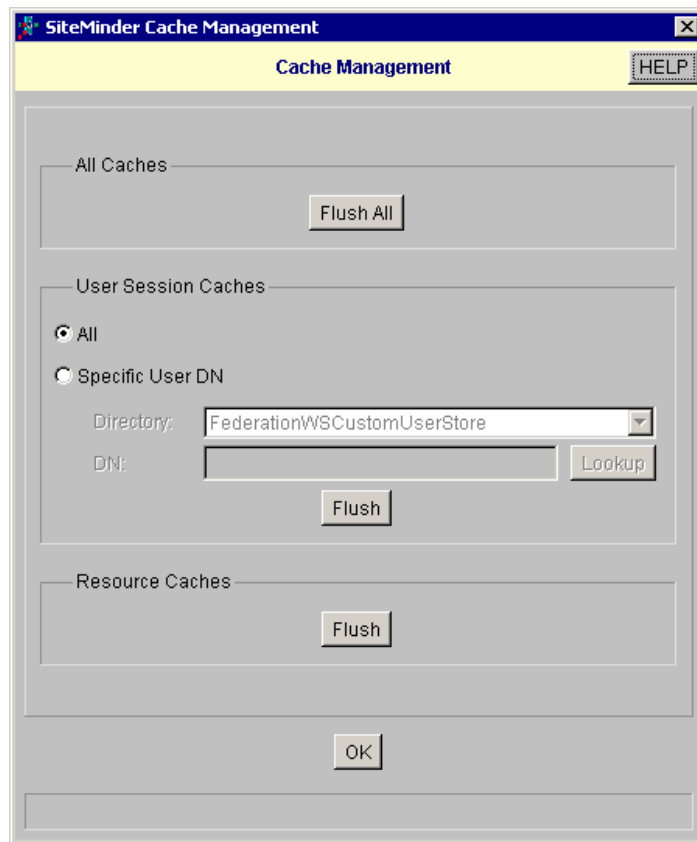
Next, click on the **Advanced** tab as demonstrated in Figure 20-17. **AssertionSample** provided in the Full Java Class Name field refers to the name of the plug-in developed to customize our SAML assertion. You may have a different plugin. Select **Apply** and then **OK** when complete.



The image shows a screenshot of the 'SiteMinder Affiliate Dialog' window, specifically the 'Advanced' tab. The window has a title bar with 'SiteMinder Affiliate Dialog' and a close button. Below the title bar is a yellow header with 'Affiliate Properties' and a 'HELP' button. The main area contains several fields: '\*Name:' with 'win1670.fedtraveler.com', 'Description:' (empty), '\*Password:' and '\*Confirm Password:' (both masked with asterisks), a checked 'Enabled' checkbox, an unchecked 'Allow Notification' checkbox, and '\*Authentication URL' with 'http://saml10-12.caf.eauth.enspier.net/siteminderagent/redirectj'. Below these is a note: '\*\*Don't forget to set up a policy to protect this Authentication URL.' A tabbed interface at the bottom shows 'Users', 'Assertions', 'Session', 'Attributes', 'IP addresses', 'Time', and 'Advanced' (selected). The 'Advanced' tab contains 'Assertion Customization Plug-in' with 'Full Java Class Name:' set to 'AssertionSample' and 'Parameters:' (empty). At the bottom are 'OK', 'Cancel', and 'Apply' buttons. A status bar at the very bottom shows 'Affiliate win1670.fedtraveler.com'.

**Figure 20-17: Affiliate Properties - Advanced**

Next, from the SiteMinder 6.0 Administration screen, click on **Tools > Manage Cache**. The Cache Management screen will appear as shown in Figure 20-18. Click on the **Flush All** button and then select **OK**. This will complete the process of configuring an AA.



**Figure 20-18: Cache Management**

## 2.3 Configure a Partner CS

Open Netegrity Policy Server 6.0 and login as described in Figure 20-1 and 20-2. Once the SiteMinder 6.0 Administration screen has opened, click on the **System** tab (left side of the screen) and then select **User Directories**. The User Directory List screen will appear as shown in Figure 20-19. To create a new Directory resource right click on **User Directories** and select **Create Directory**. Creating a directory maps the subject from the SAML assertion to the uid of the user in you backend LDAP data store.

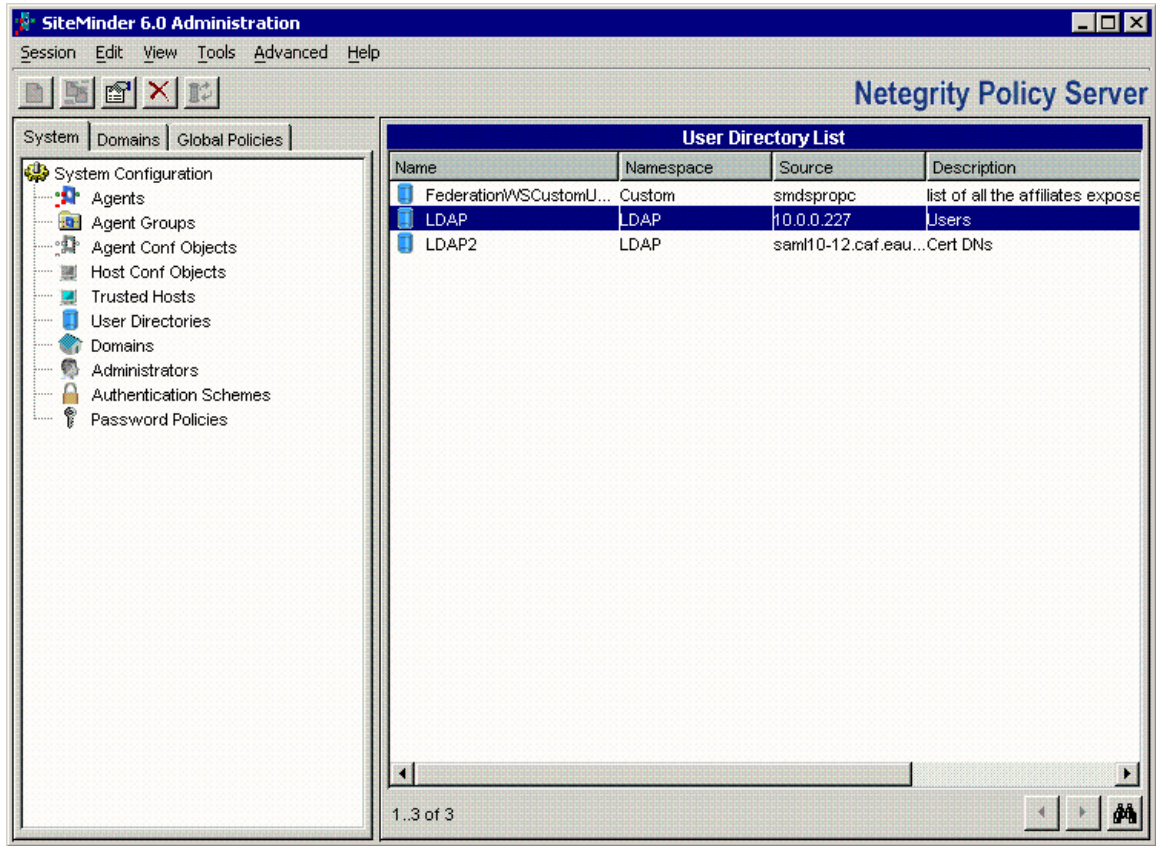


Figure 20-19: User Directory List

The User Directory Properties screen will appear as shown in Figure 20-20. Next, select the **Directory Setup** tab and provide all appropriate configuration information as demonstrated below.

The screenshot shows the 'SiteMinder User Directory Properties' dialog box. The title bar reads 'SiteMinder User Directory Dialog'. The main title is 'User Directory Properties' with a 'HELP' button. Below the title, there are two fields: '\*Name:' with the value 'LDAP' and 'Description:' with the value 'Users'. There are three tabs: 'Directory Setup' (selected), 'Credentials and Connection', and 'User Attributes'. The 'Directory Setup' tab contains a 'Directory Setup' section with '\*NameSpace:' set to 'LDAP:' and '\*Server:' set to '10.0.0.227', with a 'Configure...' button next to it. Below this are two sections: 'LDAP Search' and 'LDAP User DN Lookup'. The 'LDAP Search' section has 'Root:' set to 'dc=enspiet,dc=net', 'Scope:' set to 'Subtree', 'Max time:' set to '30' seconds, and 'Max results:' set to '0'. The 'LDAP User DN Lookup' section has 'Start:' set to '(uid=', 'End:' set to ')', and an 'Example:' field showing '(uid=ID-From-Login)'. At the bottom of the dialog are 'OK', 'Cancel', and 'Apply' buttons, and a status bar that reads 'User Directory LDAP'.

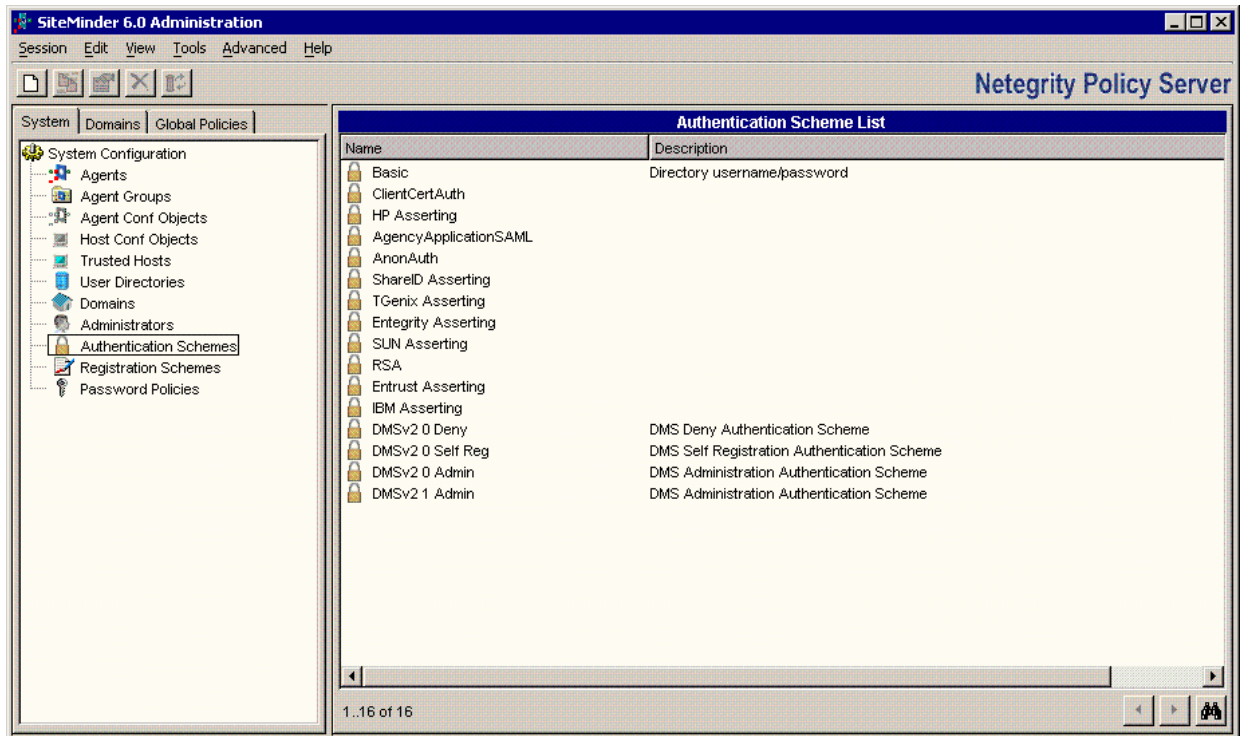
**Figure 20-20: User Directory Properties**

Next, click on the **Credentials and Connections** tab enter all appropriate configuration information as demonstrated in Figure 20-21. If desired, you can click **View Contents** to verify connection and that the policy server can connect to the LDAP server. The User Attributes tab contents are all defaults and no additional configuration information is needed. Select **Apply** and then **OK** when complete.

The screenshot shows the 'SiteMinder User Directory Properties' dialog box with the 'Credentials and Connection' tab selected. The dialog has a title bar with a close button. Below the title bar is a yellow header with the text 'User Directory Properties' and a 'HELP' button. The main area is divided into three tabs: 'Directory Setup', 'Credentials and Connection' (selected), and 'User Attributes'. In the 'Credentials and Connection' tab, there are two input fields at the top: '\*Name:' with the value 'LDAP' and 'Description:' with the value 'Users'. Below these is a section titled 'Administrator Credentials' containing a checked checkbox 'Require Credentials' and three input fields: '\*Username:' with the value 'cn=Directory Manager', '\*Password:' with masked characters '\*\*\*\*\*', and '\*Confirm Password:' with masked characters '\*\*\*\*\*'. Below this section are two unchecked checkboxes: 'Run in Authenticated User's Security Context' and 'Secure Connection'. At the bottom of the main area is a 'View Contents...' button. The bottom of the dialog features 'OK', 'Cancel', and 'Apply' buttons, and a status bar at the very bottom displays 'User Directory LDAP'.

**Figure 20-21: User Directory Properties – Credentials and Connections**

Next, from the SiteMinder 6.0 Administration screen, click on the **System** tab (left side of the screen) and then select **Authentication Schemes** as demonstrated in Figure 20-22.



**Figure 20-22: Authentication Schemes**

Once you have selected Authentication Schemes, the Authentication Scheme Properties screen should appear as shown in Figure 20-23. Provide all appropriate configuration information as demonstrated below. The **Affiliate Name** and **Password** fields correspond to the alias and password of your server certificate in `<netegrity home>\webagent\affwebservices\AM.keystore`.

**SiteMinder Authentication Scheme Dialog**

**Authentication Scheme Properties** HELP

\*Name: TGenix Asserting Description:

**Scheme Common Setup**

Authentication Scheme Type: SAML Artifact Template

Protection Level: 5 [1 - 1,000, higher is more secure]

☐ Password Policies Enabled for this Authentication Scheme

**Scheme Setup** Advanced

\*Affiliate Name: mykey \*Redirect Mode: 302 No Data

\*Password: \*\*\*\*\* \*Verify Password: \*\*\*\*\*

\*Company Source ID: a0028b7058207916c3cc33e91dfa81036d48615b \*SAML Version: 1.0

\*Assertion Retrieval URL: https://saml10-13.caf.eauth.enspier.net:7676/tfs-soap/IDPSOAP\_SAML10 \*Authentication: Client Cert

Audience: \*Issuer: https://saml10-13.caf.eauth.enspier.net/tfs

\*Search Data XPATH: substring-after((Assertion/AttributeStatement/Subject/NameIdentifier/text(), "="))

Namespace:	Search Specification:
LDAP:	uid=%s
ODBC:	name=%s
WinNT:	
Custom:	
AD:	

Edit...

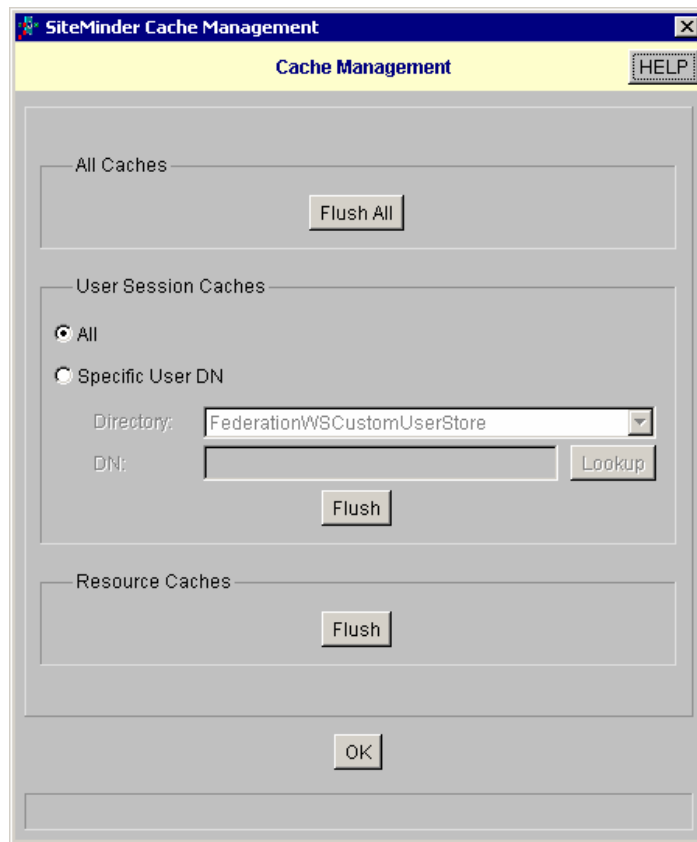
OK Cancel Apply

Authentication Scheme TGenix Asserting

**Figure 20-23: Authentication Scheme Properties**



Next, from the SiteMinder Administration screen, click on **Tools > Manage Cache**. The Cache Management screen will appear as shown in Figure 20-24. Click on the **Flush All** button and then select **OK**. This will complete the process of configuring a CS.



**Figure 20-24: Cache Management**